Loon Caller

VERMONT CENTER FOR ECOSTUDIES
UNITING PEOPLE & SCIENCE FOR CONSERVATION

Winter / Spring 2008

Vermont Loon Recovery Project - *Uniting People and Science for Conservation*

VLRP View

I've been asked in the past to share some stories about what it's like to be a loon biologist. I thought I would share some stories from two particularly full and interesting days. My work with the VLRP is my third "loon job." My first was catching and banding loons for two summers for the Whitefish Point Bird Observatory in Michigan's Upper Peninsula. Those days were exciting when netting a loon but exhausting going for three months straight with four nights off all summer. My next "job" was designing, setting up, and coordinating 500 plus volunteers for the Minnesota Loon Monitoring Program as part of a Master's thesis at the University of Minnesota. Most of this work was computer, phones, and mailings along with a bit of research and analysis. The Vermont job is by far the best as it entails a bit of everything. Thanks for the privilege to work with many great people. We've accomplished a lot over the years.

- Eric Hanson

Woody debris and vegetated shorelines, like that shown in the photo, provide important functions in maintaining a healthy lake for water quality, underwater plants, insects, amphibians, fish, loons, songbirds, and other terrestrial animals, including us.

A Day in the Life of a Loon Biologist

Part I: May 28th, 2007—23 loons on 14 lakes

In May and June, my primary task is to determine if and when known loon pairs nest, especially on lakes where there are no loon volunteers. Today, my son's schedule is all set: a friend's house as usual and mom for the other part of the day. (He has a much better social life than I ever did as a 9 year old.) The first stop is Brownington Pond at 7 a.m. Despite the risk of natural flooding, I decided last year to remove the nesting raft because there is plenty of marsh nest habitat available and the raft nest had not been successful. Today I find the pair in the SW corner cruising very near shore with one loon often pausing adjacent to some hummocks. This is nest searching at its most obvious.

I drive a few miles up the road to Lake Salem and Little Salem and spend 5 minutes scanning both lakes. No loons in sight. I know that if a loon is in feeding or locomotion mode (long dives), I could easily miss it. If two loons had been observed repeatedly here the year before, I would take more time. Instead, I move onto my next stop, a pond that fits this category: Pensioner Pond in Charleston. I do not see any loons from the access area. I ask a lady at her camp where VLRP volunteer Lynn Spensly lives and she informs me he left earlier in the morning. I have yet to meet him. While talking with her about loons I notice a large waterbird next to the reeds across the channel. I get my binoculars and am treated to one of my favorite sights – nest building. This could be the first documented nest on this pond since the VLRP started 30 years ago. I can't wait to call Lynn.

I had not heard from my reliable volunteer on Holland Pond for a while, so I decide to check on the new North pair. It ends up Tom's computer had stopped working, thus no email. The wind has picked up and canoeing against it proves invigorating. I stop and add a few rocks up front to keep my bow tracking better. My loyal hound, Willow, helps with ballast but her 30 pounds isn't quite enough. I spot two loons across the lake from last year's nest site. I see a third loon further south. I doubt the pair has built a nest yet. I find the 2006 nest site and confirm my thoughts. While I'm here, I decide to hike the trail to Turtle Pond, where Tom has observed single loons in recent years. This acidic, boggy lake hosts no loons today; I am not surprised.

Three years ago, the Northern Forest Stewardship Center's Kingdom Corp youth corps, repairing the trail to the pond, reported two loons on Notch Pond for much of the summer. Since then I've tried to make this ½ mile hike a regular stopping spot twice a summer. The pond is tiny for a loon at 20 acres, but it's deep. I scan back and forth several times with my binoculars and again with my bare eyes. Nothing. I scramble through the woods to see the outlet area. No loons there either. When I get over to the main trail again, I give another thorough look and yes, there is one, diving and surfacing, and diving again. I hang out long enough to confirm that there is only one and head back down the hill.

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Vermont Loon Recovery Project

A program of
the Vermont Center for Ecostudies and
Vermont Fish and Wildlife Department

Loon Caller

Spring 2008

The Vermont Loon Recovery Project is a program of the Vermont Center for Ecostudies (VCE) and Vermont Fish and Wildlife Department (VFWD) The VLRP's mission is to restore and maintain Vermont's Common Loon population through monitoring, management, education, and research.

VERMONT CENTER FOR ECOSTUDIES
UNITING PEOPLE & SCIENCE FOR CONSERVATION

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The Vermont Center for Ecostudies (VCE) is a non-profit organization dedicated to the understanding and conservation of birds and other wildlife. With a reach extending from northern New England through the Caribbean to South America, our work unites people and science for conservation.

To make a tax-exempt donation in support of our work, please visit our website or call (802) 649-1431. Donations of any amount help us achieve our conservation mission.

The *Loon Caller* and VCE's *Field Notes* are free to citizen scientists, donors, and partners.

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Volunteer information and VLRP publications are available at the VCE website. Communications about the VLRP and the *Loon Caller* may be addressed to:

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Loonwatch 2008

Save the Date: Saturday July 19

Contact Eric Hanson at the VLRP if you would like to volunteer and are new to the program.

Vermont Center For Ecostudies Arrives

Greetings from the snowy north country. Hopefully, by the time you receive this, some of the lake ice will be gone and loons returning. During the fall and winter of 2007, the Vermont Loon Recovery Project (VLRP) has had its own transition and now operate under the newly-formed Vermont Center for Ecostudies (VCE). You may have already received some mailings from VCE over the year and know that the VLRP is one of many citizen science programs that VCE oversees. The VCE main office is based on the Norwich-Hartford town line, but I will still be working from home in Craftsbury. As our director, Chris Rimmer, noted in the recent *Field Notes*, VCE's mission of "uniting people and science for conservation" remains as strong as ever. The VLRP will also continue its on-going mission of maintaining the loon population in Vermont now directed and funded through VCE. The Vermont Institute of Natural Science (VINS) will remain a partner in education and helping with loons in distress through their Wildlife Services department. Another change that internet users will see is streamlined data reporting through Vermont ebird, at least for the Loonwatch program in July. Check out the website, www.vtecostudies.org or VCE's *Field Notes* mailed this past March for details about how else you can become involved with VCE. Whether you document the songbird status on a mountain top, chase butterflies, follow a single loon family all summer or one day, or help VCE financially, we look forward to caring for our natural world with you in the years to come. - *Eric Hanson*

© Eric Hanson

Willow, the unofficial loon dog, in her usual position

(Continued from page 1)

The drive into West Mountain Pond can be a bit confusing the first time: multiple logging roads, rough, and a beaver-flooded 30 foot section. Once you think you're near the pond, it seems you can't get to it without trespassing. Although I have no problem knocking on doors, I use a fishermen's trail I happened across 10 years ago. This is one of the most unusual nest sites I have ever seen. The nest is located 20 feet out from shore on a fallen log. Somehow a mat of vegetation started growing on the log years ago, and the loons sculpted a nest bowl in the middle. With my 40x spotting scope zoomed in on the log, I see a loon head surveying his or her kingdom. Another loon feeds nearby. I move on to my next lake. Since I know my Maidstone Lake volunteers are keeping an eye on things, I do a quick check of the North pair, which has nested twice in the past three years in different spots. I do not see any loons in the narrows or near previous nest sites, although one could be hidden on a new nest.


Lake Willoughby © Eric Hanson

Some loon pairs use the same nest site year after year, thus nest searches can be focused on one spot. Other pairs, like Island Pond, use the same island, but build their nests in different locations every year. My volunteer on Island Pond has stepped back from helping this year, thus I need to make a quick check. I see one adult as I approach the island from the north. Do we have a nest? Island Pond often has one to three extra loons hanging out on it, so seeing a single loon does not necessarily mean the other one is on a nest, but the question still pops into my head. I look over the 6 or 7 different sites used in the past decade and find nothing. As I paddle 30 feet off shore peering under every overhanging shrub, I spot well-hidden nest; it's not a birch tree with odd markings as I'd first thought. The pair has finally nested after two years of no nesting, which was likely because of conflicts with the other loons. Good luck I tell them. I'm running out of time so I'll have to come back before the weekend to get the nest warning signs out.

At Jobs Pond, a twosome is right out in the middle. They are the pair that re-colonized this pond after a 6 or 7 year absence. They built a nest bowl the year before but did not use it. In 2000, the first male had died after ingesting lead fishing gear, and unusually, he was not replaced. The pair stopped being present. We are not sure if the female in this new pair is the original female, but we do know that the new male on Jobs Pond was banded on Bald Hill Pond back in 1999. He was challenged in 2002 or 2003 and lost his spot in that territory and was first observed staying on Jobs in 2005. I'm finding that experienced breeders that are displaced often start new territories. My next stop is Bald Hill Pond. This is another pond where I had removed the nesting raft. With the spotting scope, I see a pair at the far north end, but it appears they've yet to find a natural spot to nest. A mile down the road I paddle to the Newark Pond nesting island. I removed the nesting raft here two years ago and the pair nested in 2006 in a natural spot, but it flooded. Today, I find a loon perched higher up in a new location right below the Nature Conservancy sign on the island. It's comforting to know this nest site is protected far into the future on this lake where increasing development has meant a loss of riparian habitat. There is one more pond in this Newark/Westmore area that has a nesting pair: Long Pond. I pull into the access and the pair is right there, diving and feeding for small fish, another two minute stop.

The light is perfect as I drive around the north end of Lake Willoughby and over the hills to Barton. I always glance out the window at Willoughby but it's a difficult lake to survey well and would take time that I don't have. Maybe someday I'll get a report about a loon sitting on shore in an odd spot, since there are no marshes or islands on the lake. If I don't stop, I can conduct three more "drive-by" surveys with the remaining light of the day. I spot a single loon on Lake Parker. The lake is relatively large but has had little loon activity over the years. I know there have been some water quality concerns with high nutrient loads and algae. Is this keeping the loons away or is it because there were few nesting lakes nearby, until recently? Colonization can take a long time. Daniels Pond, over the ridge, is much smaller, but had pair-like activity the year before. Today I'm rewarded with the sight of two loons. Maybe, just maybe, this will be the year they use the undeveloped marsh. My last stop is along the road on Shadow Lake in Glover. Like many lakes in Vermont, road crews 150 years ago put the horse path right on the edge of the lake. Now it is a paved road lined by camps stacked on top of one another. The lake is big, deep, and clear, ideal for loons to feed, but there is no nesting habitat left. There is almost always one loon here and sometimes two or three. Chicks have been reported here in the past, but I've never been able to confirm their presence. Today there are two adults, which makes for a record high five adults at the same time on these last three lakes.

It's approaching 9 p.m. as I pull into the driveway. This might be a record day for me seeing 23 loons on 17 lakes. Twenty-five years ago, this number of loons accounted for almost the entire state population. I have counted more loons in one day before, but in those cases, I had come across large gatherings of six or more loons. Today, the pairs were on their respective lakes, focused on what they should be doing at this time of year: pairing up, thinking about nesting, or nesting. I only had four lakes today where I did not see any loons, and one of these, Maidstone, does have loons, but I only looked at the nesting site. When going loon watching, I would not recommend this method of surveying. Except for the nest searching behavior, I did not take the time to connect with the loons or lakes. To sit on shore or float gently in a boat, to watch the water droplets roll off the head of a loon as it surfaces, to let thoughts wander with the ripples as the loon disappears, that is loon watching. I was still rewarded with what I saw today, as a biologist tracking loon pair activity. I'm most rewarded when I hear people's stories about how a loon has affected their lives. That connection—of modern humans to this ancient species—is what makes my work much more than a job.

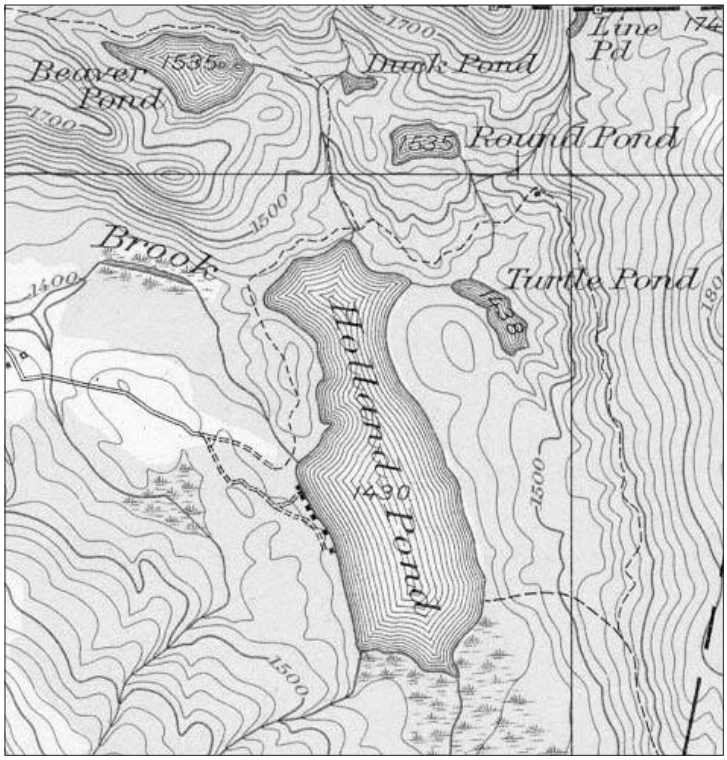
-Eric Hanson

Volunteers of the Year: Tom and Susan Fetter
(Beaver, Holland, and Turtle ponds)

Every spring I look forward to my annual get-together with Tom and Susan Fetter. The Fetters started following the loons in the early 1990s. Although, Tom could probably take care the Holland Pond nesting raft himself, I join him each year to chuckle at his multitude of stories and for the annual thrill of nearly swamping his aluminum canoe loaded with cement blocks, nest warning signs, dirt, and plants. The wind seems to always blow during my early May visits. I've never answered so many loon questions in such short periods of time as when I am with Tom. He's a constant thinker and thinking like a loon is his specialty. This loon pair, along with Tom and Susan, have been through a lot. Neither has been rewarded much in terms of chick numbers, despite years of dedication. The loons keep trying to nest; Tom and Susan keep watching, educating their neighbors, and taking care of all the management activities on the pond.

Bald Eagle on Holland Pond

The year of major excitement occurred in 2005. The loons had nested on the Holland raft for only the second time. Because of the raft, there was no need to worry about the regular flooding events that plague this pond. (It only takes 2 inches of rain to cause the pond to rise 14-18 inches in a day.) That summer a second pair of loons was forming at the north end and sometimes a 5th or 6th loon would visit. On an early June evening, Tom heard the loons calling; they were more excited than usual. He then saw some major splashing followed by one loon in pursuit of another. This chase continued into darkness before things settled down. The next morning, Tom saw the fight continue further south, but this time, one loon did not leave the scene. "Killer," as Tom now calls him, returned to the nest, while his challenger floated dead. Tom recovered the body so the VLRP could send it down to Tufts University for the New England loon mortality study. A few weeks later, Holland Pond had its first loon chick in a decade. Tom and Susan were truly proud parents (or grandparents as it may be).



To keep things exciting, two bald eagles had been harassing the loon family all summer. In late July, as Tom watched, the immature eagle dove down, hit the chick, picked it up out of the water, carried it about 50 feet, and then dropped it. All the parents, loons and Tom, were frantic. He was sure the chick was dead, but amazingly, it was not seriously hurt and swam quickly toward shore. The parent loons joined it. Tom and Susan did too. No snack for the eagles today.

I can still hear the tremor in Tom's voice relaying this story. Tom is big guy. His voice is pretty gruff. I think he's in his 70s age-wise, but one would think he's maybe 60. Not much can rattle him, but after these two incidents, he stated "this is almost too much for an old guy to handle." Wild Kingdom has arrived on Holland Pond, and Tom's heart is as big as ever.

Tom and Susan also coordinate the Loonwatch surveys on Holland, Turtle, and Beaver Ponds with the help of their neighbor, Chris Owen. Sometimes they've even included Round and Line Ponds. It takes hours to reach all these remote lakes, hiking in the woods beyond Holland Pond on unmarked trails and sometimes no trails. Thanks to the Fetters, it all gets done.

- Eric Hanson

Pond Profiles: Beaver, Holland, and Turtle

A loon pair has been documented on Holland Pond every year since 1978 except two. The pair has usually nested at the south end on some rocky islands but occasionally the pair has tried different spots in the marsh and once over a mile north in a sheltered cove. Loon pairs will often switch nest sites after a year of nest failure or, like his pair, will just not nest at all. Despite the constant pair presence over 28 years, they have only nested 15 times with 8 of those attempts successful. Nine of the 10 chicks were produced between 1989 and 1996 with the eagle-attack chick surviving in 2005 (see story above). The nest has often been flooded or depredated, especially since 1996. The flooding events beg the question on whether we have seen greater single rainfall events in the past decade. The pair has used the nesting raft in four of the past five years, but they still have had problems. An eagle might have killed the chick in 2003 and took the egg in 2007. In 2006, something depredated the eggs. In 2008, we might try putting an avian guard over the nest to make it harder for eagles and gulls to fly at the nest. An avian guard is essentially camouflage mesh put over the raft using arched fiberglass rods. A second loon pair at the north end nested in 2006 (nest flooded) and was present in 2007. We'll see if they have any better luck than their neighbors to the south.

The loons on nearby Beaver Pond have had better success despite an eagle likely taking a chick or two. To the best of our knowledge the pair has been present for 26 years, nested EVERY year, and produced 28 chicks from 23 successful nests. That is a lot of loon chicks from a 40-acre pond, and it's clear, the presence of eagles will not always cause nest failures and lost chicks. The loon nest is not visible under the canopy of trees and shrubs, thus much guess work is necessary to figure out what this pair is up to. One year after Tom Fetter reported one chick, I hiked the 2-mile trail to the pond and swam out to the island to see if a second egg might have been left in the nest . Within seconds of entering the water, I was being escorted by a loon, the closest I've ever been IN the water with this big bird. I did not find another egg, but the nest site was gorgeous and highly protected from all angles, including above.

Loons have nested twice on Turtle Pond in 1981 and 1982. A single loon has been observed on the pond often since 2005, thus we are checking it more frequently for possible pair activity. The shoreline is boggy and surrounded by spruce and fir, bringing me back to my stomping grounds of the Minnesota's Boundary Waters Canoe Area. It is truly enjoyable to be on a wilderness pond that requires a mini-adventure to reach it. The loons in this region are fortunate as half of Holland and all of Turtle and Beaver ponds are within the Bill Sladyk Wildlife Management Area and will remain wild forever. ***

Highlights from 2007

(see page 8 for 2007 loon population numbers)

2007 was a busy year with eight new nesting pairs of which several were on very busy lakes and many loons in distress to monitor closely, There was a major rain event on 10 July that likely caused the flooding of 4 or 5 nests. If this rain event had occurred in late June, the number of flooded nests would have been tremendous.

New nesting pairs: Bruce P. (flooded nest), Chandler P. (flooded nest), L. Dunmore (1 chick), Green River Res. – SE (1 chick), Osmore P. (flooded nest), Pensioner P. (1 chick), Shadow L. – Concord (abandoned nest), Woodbury L. (lost chick).

Note: The loon chick that hatched out on Lake Dunmore is a major VLRP milestone. In 1902, Reginald Howe wrote in "Contributions to North American Ornithology" that the Common Loon "breeds not uncommonly on Bomoseen, Memphremagog, Dunmore, and elsewhere." The loons disappeared from the region sometime after 1902, and until 1995, there were no loons nesting within 45 miles; now there are six pairs.

Territorial pairs no longer present: Greenwood L., Knapp Brook P., Marshfield P., Neal P., Seymour L.-West, Wapanacki P., and possibly L. Willoughby. We'll need to keep monitoring these lakes often.

New territorial pairs: Curtis P. (lost chicks?), Derby P., L. Fairlee, L. Groton-North, Maidstone L.-SE, Wallace P., and Warden P.

Loon Mortality: eagle depredation (L. Champlain 2 adult loons stuck in ice), fishing gear (Clyde Res. and L. Dunmore), unknown (L. Champlain-North Hero, L. Groton, and L. Willoughby). Six chicks disappeared after interactions with intruder loons; 1 disappeared after July 10 storm; remainder disappeared for unknown reasons.

Loon Rescues: Removed fishing line (subadult on Somerset Res.), recovered and released after crashing on roads (Londonderry, Stowe, Williston), rescued from ice (L. Rescue and pond in Cambridge), loons freed themselves from fishing line after intensive monitoring and rescue attempts (Chittenden Res, No. 10 P., and L. Willoughby)

Nest sites: 19 on nesting rafts, 23 on islands, 20 on shorelines

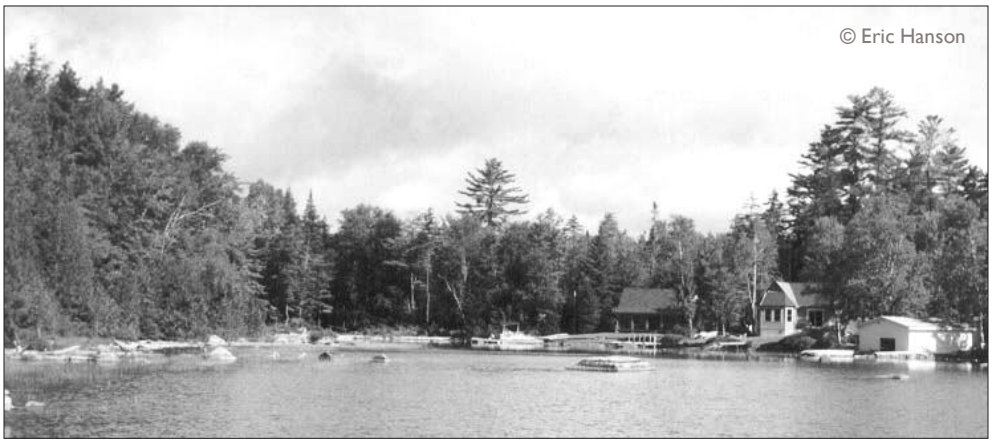
Number of Loon Presentations: 22 to over 500 adults and 200 children. For list of upcoming public programs by VCE biologists and the VLRP, check the VCE website.

Loon on nesting raft—Holland Pond

The Importance of Forested Buffer Strips Along the Shores of Lakes

By VLRP Volunteer Judy Davis

Shorelands are the places where land and water meet, whether at oceans, lakes and ponds, rivers and streams, or vernal pools and wetlands. In these areas, animal and plant concentrations are especially rich, especially productive, and at the same time especially vulnerable to development pressures.
Among other functions, natural or vegetated riparian (shoreland) areas along lakes and streams slow down, cool, filter, or transform silted, nutrient-loaded or toxic runoff, reduce erosion, stabilize stream banks and shorelines, prevent ice damage, attenuate floods, promote recharge of groundwater, and provide habitat for 50 to 75% of all animals for some portion of their lifecycle.



Forested and disturbed shorelines. The shoreline on the left promotes shading and cooler temperatures, aquatic plants, aquatic insects, fish reproduction, fish habitat, less runoff pollution and silting, and habitat for terrestrial animals.

The transition areas between land and water are the keystone of lake ecosystems. The forested areas along the shore and the littoral zone (the shallow water area next to the shoreline) provide habitat, food, shelter, and travel corridors for a large number of aquatic and terrestrial species. To protect water ecosystems, woody vegetation at the shoreline is crucial.

Importance of the riparian zone (shore/water zone):

- The canopy provided by overhanging branches cools the shallow water, and is a source of food, as insects fall in the lake.
- Leaves, branches, and trees fallen in the water provide a variety of "structure," an important element of aquatic habitat that offers various living surfaces for insects, a food source, and shelter.
- Water quality is protected by stable banks and buffer strips maintain a stable lake ecology.
- Many terrestrial species rely on shoreland vegetation for shelter, breeding areas and food.
- The zones of aquatic plants that grow along undisturbed shorelands offer habitat structure, water-cooling, and a wave buffer.
- Vegetated riparian zones are critical to the base of the food chain for lakes, thus impacting both fish and loons.

According to Maine Audubon, "More than 60 species of water-dependent birds, mammals, amphibians, and reptiles in Maine require shoreland areas for shelter or a critical part of their life cycle such as feeding or breeding. Shoreland habitat also provides other species access to drinking water, and acts as a travel corridor as well as important core habitat. Up to 85 percent of Maine's vertebrate species use the shoreland zone at some time during their lives. Shoreland habitat also filters runoff from developed areas, helping to maintain clean water that fish, insects, and other aquatic species require. ***

How lakeshore owners can help:

- ◊ Keep most of your shoreline "wild" with only a path leading to a dock or small beach area.
- ◊ Let lawns grow wild and plant low shrubs to replace them.
- ◊ Do not use fertilizers.
- ◊ Maintain woody plants along shorelines and do not remove them from the water edge.
- ◊ Keep the wild buffer strip as wide as possible: 10 feet at a minimum, 100 feet being much better for fish and wildlife.
- ◊ For the view, keep narrower viewing holes to the lake cut back, but not the entire shoreline.
- ◊ One cleared parcel on a lake will not likely have an impact, but as other people do the same, the cumulative impact is huge. We are all responsible for out lake's health.
- ◊ Ask your lake association and neighbors to help.
- ◊ Go to the Vermont Agency of Natural Resouces Lakes and Pond Division for more information: www.anr.state.vt.us/dec/waterq/lakes.htm
- ◊ Think about what type of lakeshore you like to look at: lawns and highly visible houses or trees and barely visible houses.

Loons and Lakeshores

- ♦ Most loons in Vermont nest on private lands, which are vulnerable to permanent loss if the land is cleared, camps are expanded or added, there is change in ownership with more development, or other unforeseen habitat loss at the nest site or nearby.
- ♦ Protected loon habitat helps protect lake water quality and riparian habitat.
- ♦ **Landowners of loon nest sites or extensive undeveloped shorelines:** consider placing a conservation easement on part of your land, discuss the future of the shoreline with your family, and make a plan to protect it.
- ♦ Undeveloped lakeshores are disappearing and almost gone on many Vermont lakes. Think of the future.

The Call of the Loon *by VLRP Volunteer Mike Newkirk*

I was familiar with the haunting cries of the loon decades before I knew what it was. The feeling of nature that accompanied that sound started me on a minor obsession, a quest to hear this bird's "call of the wild." I grew up near Kinderhook Lake, east of Albany, New York. On a few occasions my father would bring me and some of my 6 siblings on short overnight trips to the Adirondack Mountains. I don't remember much about the trips, but I do have one lasting memory of standing in water up to my neck and actually see my feet. That wasn't possible in Kinderhook Lake where your feet couldn't be seen in knee deep water, due to algae that was the consistency of pea soup. I always pined for those crystal clear lakes of the mountains.

A turning point for me was getting my drivers license and my first car. My first mammoth road trip was a 40 minute ride to Albany for the opening of the brand new, New York State Museum. I entered the Adirondack display and was instantly reminded of those trips with my father over a decade earlier. The smell of cedar was all around and also, that mysterious, haunting distant sound that I now clearly remembered from the past. Although, being the typical unobservant male, I didn't bother to separate the sounds and smells into their creators, but grouped the experience together as the essence of the northwoods.

I began my infrequent quest to find the "northwoods" again. There were several camping trips and many fall weekends at a friend's camp. It was nice, but it didn't seem the same. Maybe I was just getting older and those childhood excursion memories were just irreplaceable classics. In reality, acid rain had thinned the fish population on the lakes. Hence, the loons were less numerous, although I still really did not know what one was yet.

Then in the late '80s, I took my young son to the New York State Museum. The smells and sounds of my childhood trips were still in the Adirondack room. I realized that most of this effect was that haunting cry in the background. (It has taken me many years to reach this wisdom). I didn't leave until I was able, with the help of the museum, to ascertain that the haunting cry came from a large beautiful bird. The search was on!

I would venture from Massachusetts with my family to the mountains of the northeast but that elusive sound was still just that, elusive. In 1991 we moved to Vermont, and those great clear northern lakes with the smell of cedar were all around us, but no loons. We kept searching. While reading a newspaper story I found out about the Vermont loonwatch day. I quickly signed up. As a result of the area I lived (north of Rutland), I was assigned lakes that rarely had loons. It was a noble effort anyway. Everything changed the following year. In the mail was the loonwatch annual report. This was like the Vermont treasure map of loons, a complete list of loon activity and how many loons are actually on each lake. I, of course, had been looking in the wrong places for years and kind of needed the information to actually fall into my lap. It did.

So I loaded my wife and now four children into the mini van. (I really wasn't spending all my time looking for loons while raising four kids.) We took day trips and short overnight excursions to find that long searched for sound in the wild. Of course this still eluded us, wrong time of day, loons too busy to call, or something. It now became somewhat of an amusement to my children, but they loved the trips. At the end of the summer, we ventured all the way up to Maidstone Lake in the Northeast Kingdom. We had a picnic by the lake and spent the evening near the water. Nothing. The next morning we stopped back at the lake for one last try. As we climbed out of the car, there it was. A yodel followed by a wail, or something like that. I could see a look of amazement and excitement in my wife's face. My son said, "Ok we heard it, lets go home".

The next few years we camped on almost all of the lakes that had loon activity. My children really did develop a respect and sense of awe for the northwoods and the loons. There is nothing like the pre-dawn wail of the loon over a mirror-still lake. It's no wonder the first explorers coined the term "wilderness" from their exploration of the northwoods. I bet the loon was the major player in that situation.

The first loon chicks on Chittenden Reservoir, 2007. One chick survived through August. Chicks were also observed for the first time in at least 50-100 years on Lake Dunmore and Woodward Reservoir in central Vermont.

My volunteer work with the loon project now involves my entire family. We have been managing a nesting platform on Chittenden Reservoir for the last seven or eight years. This originally was a lake with little or no loon activity, but that changed in 2005. We had a young pair but had some bad luck with inexperience and flooding. The third year was the charm, with one chick surviving in 2007. We are thrilled to know we're helping bring loons back to central Vermont, even if it's only one or two at a time. ***

Vermont Loon Productivity Over 30 Years (1978-2007)

Which lakes in Vermont have produced the most loon chicks and have had best survival rates? Which lakes have lots of nesting attempts but low chick survival? And which lakes have had pair activity but little or no nesting? Scan the tables below to answer these and other questions about loon nests and chick survival. The tables are sorted by total surviving chicks since 1978. The highlighted gray blocks indicate the territories with the highest productivity. For example, the 1.13 chicks per territorial years for the Green River Res.—NW loon territory means that about 11 chicks were produced during each 10-year period. The North America average is 0.53 chicks per territorial years, which translates into about 5 chicks over a 10-year period. The Vermont 30-year average is 0.71 chicks per territorial years, one of the highest rates in North America. On Holland Pond, a loon pair has been present for 28 years, but has one of the lowest rates of nest success and chick survival in the state (0.36). Hatch marks indicate lower than average productivity. Ponds with pairs that are not nesting will likely have a lower productivity rate.

2007 Results

Territorial pairs: 82 | Nesting pairs: 62 | Chicks hatched: 71 | New nesting pairs: 8

Adult loons counted loonwatch: 218 (on 148 lakes) | Successful nests: 47 | Chicks surviving (Sept. 1): 56 | Pairs no longer territorial: 7

Lake	years w/ territorial pair	years nested	years w/ chicks	total # surviving chicks	chicks surviving per territorial years	2007 surviving chicks
Green River Res - NW	30	29	23	34	**1.13**	2
Maidstone L - South	30	26	25	31	**1.03**	0
Norton P Island	30	29	23	31	**1.03**	territory
Peacham P North	30	30	25	31	**1.03**	2
Beaver P	26	26	23	28	**1.08**	1
Thurman Dix Res	28	27	23	28	**1.00**	1
May P	21	19	17	24	**1.14**	1
Somerset Res - Dandeneau Bay	29	26	20	24	**0.83**	1
Wolcott P	20	16	15	22	**1.10**	1
East Long P	28	25	17	21	**0.75**	territory
Peacham P SW	23	21	16	19	**0.83**	0
Little Averill L West	30	22	13	19	**0.63**	territory
Zack Woods P	14	12	11	18	**1.29**	1
Kettle P	22	19	13	18	**0.82**	flood nest
Forest L	16	14	11	17	**1.06**	sat too long
Molly's Falls Res	22	13	12	16	**0.73**	1
Spectacle P	21	13	11	15	**0.71**	2
McConnell P	22	15	11	15	**0.68**	2
Miles P	22	15	11	15	**0.68**	2
Newark P	25	18	11	15	**0.60**	2
Martins P	13	11	11	14	**1.08**	0
Ninevah L	13	13	11	13	**1.00**	1
Norton P South	10	8	8	12	**1.20**	1
Coles P	12	10	9	12	**1.00**	2
Long P (Westmore)	12	10	9	12	**1.00**	2
Seymour L - Winape	15	10	9	12	**0.80**	0
Lower Symes P	7	7	7	11	**1.57**	1
Hardwood P	18	10	9	11	**0.61**	no pair
Groton L - South	9	8	7	10	**1.11**	1
South P	13	10	8	10	**0.77**	flood nest
Holland P - South	28	15	8	10	**0.36**	nest depredated
Wallingford P	8	8	6	9	**1.13**	2
Joe's P	14	8	8	9	**0.64**	1
Great Averill L - North	15	14	8	9	**0.60**	flood nest
Nichols P	**11**	**9**	**7**	**8**	**0.73**	**sat too long**
Hardwick L	**6**	**5**	**5**	**7**	**1.17**	**2**
Stiles Res	**8**	**7**	**5**	**7**	**0.88**	**1**
Bald Hill P	**10**	**7**	**6**	**7**	**0.70**	**territory**
Berlin P	**10**	**6**	**5**	**7**	**0.70**	**1**
Baker P	**3**	**3**	**3**	**6**	**2.00**	**2**
Fosters P	**5**	**5**	**5**	**6**	**1.20**	**2**
Somerset Res North Islands	**6**	**6**	**4**	**5**	**0.83**	**1**
Ricker P	**7**	**5**	**4**	**5**	**0.71**	**2**
Spring L	**7**	**6**	**4**	**5**	**0.71**	**sat too long**
Bourn P	**9**	**6**	**6**	**5**	**0.56**	**1**

Lake	years w/ territorial pair	years nested	years w/ chicks	total # surviving chicks	chicks surviving per territorial years	2007 surviving chicks
Bean P	3	3	3	4	1.33	2
Eligo L	6	6	4	4	0.67	1
Browningto n P	9	6	2	4	0.44	eggs gone
West Mtn.	10	9	6	4	0.40	0
Buck L	11	5	3	4	0.36	territory
Little Hosmer P	11	9	5	4	0.36	1
Keiser P	3	3	3	3	1.00	1
Eden L	7	4	3	3	0.43	1
No. 10 P (Mirror)	9	2	2	3	0.33	2
Jobs P	10	4	3	3	0.30	territory
Seymour L - West	4	1	1	2	0.50	no pair
Dunmore L	1	1	1	1	1.00	1
Green Riv. Res - SE	1	1	1	1	1.00	1
Knapp Brook P	1	1	1	1	1.00	no pair
Chittenden Res	3	3	1	1	0.33	1
Echo L- Charleston	3	3	1	1	0.33	nest depredated
Pensioner	3	1	1	1	0.33	1
Woodw ard Res	3	3	1	1	0.33	1
Maidstone L - North	4	3	2	1	0.25	1
Waterbury Res	4	3	1	1	0.25	no pair
Greenwood	5	1	1	1	0.20	no pair
Memphrama gog	5	2	1	1	0.20	no pair
Ew ell P	8	2	2	1	0.13	territory
Bruce P	2	1	0		0.00	flood nest
Chandler P	2	1	0		0.00	flood nest
Harveys L	2	1	0		0.00	terr
Holland P - North	2	1	0		0.00	terr
Moore Res	8	4	3	0	0.00	no pair
Osmore P	8	2	1		0.00	flood nest
Peacham P SE	2	2	0		0.00	egg gone
Pigeon P	8	1	0		0.00	no pair
Shadow L (Concord)	1	1	0		0.00	abandon
Woodbury	5	1	1	0	0.00	0

A Day in the Life of a Loon Biologist

Part II: June 15th, 2007—a more typical day

It's Thursday night and I just get off the phone with the former VLRP biologist, Sally (Borden) Buteau, who reports that two adult loons have been near the only island on Lake Dunmore all week. This is big news. During the past 30 years, loons might land on Dunmore in May and September, but that was all. Sally knew to keep her binoculars handy in 2007, because in 2006 adult loons were reported on the pond throughout the summer, a first. This potential pair is definitely interested in the island, and whether this year or in the future, the nest will likely be on the island. Sally and I decide it would be worth placing nest warning signs around the island at least until early July. Sally had spent part of the last three days trying to find out who owns the island. Earlier tonight, she received a message from the landowner giving us permission. I call the local VFWD game warden to let him know our plans. It's a go.

I often do not know exactly what I'll be doing or where I'll be the next day. Now I'll be adding Lake Dunmore to the list. I've already scheduled an outing with a new volunteer on Harvey's Lake for 11 am. After getting my son off to nature camp, I gather the materials for eight loon nest warning signs, and stop at Aubuchon's to purchase 200 feet of rope. On my way to Harvey's, I check on two relatively new breeding ponds, Keiser and Ewell. The pairs are hanging out on both ponds. Bill Biddle is a high school teacher and avid canoeist who lives above Harvey's Lake, a perfect combination for a loon volunteer with summers free and a reason to get out on the water. We slowly circle the lake in his canoe, spot the loon pair in the middle, and assess the shoreline for nesting potential. There is not much. I think the loons realize this too as in 2006 they nested in an unlikely location, 100 yards down the outlet in a narrow stream. Predators likely depredated the eggs along this raccoon and mink highway. With a pair present, failed nest, and limited or no natural nesting sites left on the lake, Harveys is a candidate for a nesting raft. We'll give them a few more years of trying. Bill and I spot two or three areas where we could put a nesting raft in the future, but we would have to get the close cooperation of landowners to alter their activities on the shoreline. This takes much work, but luckily loons have a way into people's hearts.

I'm almost an hour and a half late to Lake Dunmore, now 4:30 in the afternoon. Things always take longer than expected, especially when one is criss-crossing the state. Fortunately, Sally's two daughters are content at the beach, and her husband has arrived to take them home for dinner. We pound the metal nest warning signs onto the wood bases and put the rope and cement blocks into the tippiest canoe I've ever paddled in. Without knowing the depth of the water, we do not cut the rope for each sign until we are out on the water. The process is 1) tie the rope to the cement block, 2) throw it overboard, 3) feed out an extra 10-15 feet of line, 4) cut, and 5) tie to the sign. We're placing eight signs around the island, so it's important to strategically think how boaters will move, so they do not miss the signs. It is much easier to place nest warning

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Loon Caller

Vermont Loon Recovery Project
Vermont Center for Ecostudies
PO Box 420
Norwich, VT 05055

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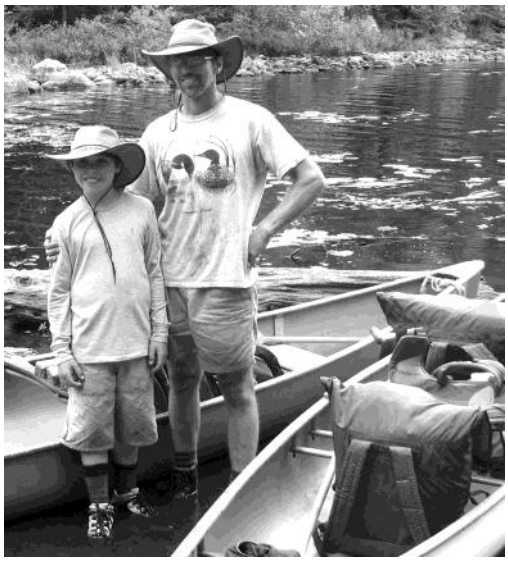
signs around a loon nest located in a cove. We see the loons to the north of the island. I wonder if we are wasting our time since some loon pairs take years to get established. Time will tell.

The signs are out; now the education begins. Sally and I drive around the lake putting up "loon nesting" information signs at the access areas, state park, the two boys and girls camps, and two marinas. Sally will put up signs at the local store and three post offices later this evening. We also talk to as many people as we can at these locations. Dunmore is a very busy lake. Loon conservation is often more about managing people than loons. With our efforts, the loons will hopefully have a quieter spot to nest, if they try. Even if the pair does not nest, which is typical of new pairs, we will have begun to educate the lake users on Dunmore about loons and nesting needs, and get them used to the idea that a local play spot and fishing hole will be off limits for a short time.



VLRP biologist, Eric Hanson (right), and his loon assistant, Anders Hanson

On my home, I decide to paddle Sugar Hill Reservoir located about 3 or 4 miles from Lake Dunmore as the crow flies (20 by road). The game warden had observed two loons twice in May. The lake is calm as the sun sets, and the sky is filled with pink and purplish hues. Now I just get to paddle and soak in the calmness of this remote reservoir as the day fades away. Despite the two and a half hour drive home, the excitement of seeing two loons on Dunmore after a 50 to 100 year absence keeps me awake.

Editor's Note: The loon pair on Lake Dunmore did nest but not without some excitement. First, the nest was located under a fully leafed-out bush and was not confirmed until July 9, when I came down to a Lake Association meeting. Second, people respected the nest warning signs really well with a few exceptions. One of these exceptions was when two kayakers were observed within 10 feet of the nest, and another group of people swam to the island and were walking all over it. They did not leave after being asked by VLRP volunteers. The volunteers noticed a game warden truck in the parking lot and went searching for him. The game warden caught up with the people and issued them a ticket. The chick hatched out within the next two days and survived the summer boat traffic and all the attention of new loon watchers. Third, four subadults were also on the lake all summer, and unfortunately one died after ingesting fishing gear. The game warden and I attempted to catch this bird numerous times (thus many more trips and late night drives home). My nine-year old son spotlighted his first loon when we finally captured it during the Pleides in early August. However, the loon was too far gone and died a day or two later, which was a huge disappointment after spending weeks trying to help the bird and finally catching it.

- Eric Hanson

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